

REMARKS/ARGUMENTS

The following arguments are provided to impart precision to the claims, by more particularly pointing out the invention, rather than to avoid prior art.

35 U.S.C. § 103(a) Rejections

Examiner rejected claims 5-7 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,583,474 (hereinafter "Mizoguchi '474") in view of U.S. Patent 6,121,852 (hereinafter "Mizoguchi '852").

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). [MPEP § 2143.03]

Claim 5 includes limitations of a first magnetic layer over the first dielectric layer including a slot having a first shape, a second dielectric layer *over the first magnetic layer*, and a conductor *over the second dielectric layer* having a second shape, the first shape is independent of the second shape. As a result, the conductor is over the first magnetic layer including the slot.

Neither Mizoguchi '474 nor Mizoguchi '852 teach these limitations. As a result, claim 5 is patentable over Mizoguchi '474 and Mizoguchi '852. The Examiner admits that Mizoguchi '474 does not teach a slot having a first shape independent of a second shape of a conductor. Mizoguchi '852 also does not teach the above limitations. Specifically, the opening 37 in the upper magnetic layer 34 is formed *above* the conductor 32 (See Fig. 23B, Col. 15, lines 61-67). As a result, claim 5 is patentable over Mizoguchi '474 and Mizoguchi '852.

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. [MPEP § 2143.01]

The Examiner asserts that it would have been obvious to combine Mizoguchi '474 and Mizoguchi '852 for the purpose of improving a high Q inductor. However, the opening 37 taught by Mizoguchi '852 is formed only to provide access to one end of a spiral conductor (Col. 15, lines 63-65). Note in Fig. 23B that the exposed conductor 32 is coupled with a voltage source. Also note that while both Figs. 23A and 23B disclose a $\frac{1}{4}$ wavelength transformer (Col. 15, lines 58-60) according to similar embodiments, only the transformer in Fig. 23B includes an opening 37, since the meandering conductor of Fig. 23A can be accessed outside of the upper magnetic layer 34. Therefore, it is clear that the opening 37 is created to provide access to the conductor 32.

Mizoguchi '474 teaches a magnetic layer having a spiral groove extending exactly along the spiral conductor of the coil 40 (Col. 20, lines 51-53). The spiral groove causes the four triangular regions of the magnetic layer 30 to have axes of easy magnetization, and therefore the magnetic layer has no regions which can be saturated magnetically (Col. 20, lines 53-58).

Since the opening 37 of Mizoguchi '852 is not taught to alter the magnetic properties of the $\frac{1}{4}$ wavelength transformer, neither reference suggests a combination with the other in this manner, since the groove and the opening each perform a different purpose. Specifically, Mizoguchi '474 does not suggest

a combination with Mizoguchi '852 since the coil 40 of Mizoguchi '474 is already accessible, and as a result there would be no need to add the opening 37 of Mizoguchi '852 to provide access to the coil 40.

Since the opening 37 of Mizoguchi '852 is taught only to provide access to a conductor 32, Mizoguchi '852 only teaches forming the opening in the upper magnetic layer 34. It is unnecessary to form the opening in the lower layer 35, since, as can be seen in Fig. 23B, the conductor 32 is formed on top of the lower magnetic layer 35, and one end is accessible without forming an opening in the lower layer 35. As a result, there is no suggestion or teaching in Mizoguchi '852 to form the opening 37 in the lower layer 35, since there would be no benefit to forming an access hole in the lower layer 35.

As a result, there is no suggestion to combine Mizoguchi '852 and Mizoguchi '474, and claim 5 is patentable over Mizoguchi '852 and Mizoguchi '474.

Independent claims 6 and 7 include limitations similar to those discussed above regarding claim 5. Since claim 5 is patentable over Mizoguchi '474 and Mizoguchi '852, claims 6 and 7 are also patentable over Mizoguchi '474 and Mizoguchi '852.

Examiner rejected claim 9 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,583,474 (hereinafter "Mizoguchi '474") in view of U.S.

Patent 6,121,852 (hereinafter "Mizoguchi '852") and further in view of U.S. Patent No. 4,791,719 (hereinafter "Kobayashi").

Claim 9 depends from claim 7, discussed above, and therefore includes all the limitations of claim 7. Since claim 7 is patentable over Mizoguchi '474 and Mizoguchi '852, claim 9 is patentable over Mizoguchi '474, Mizoguchi '852, and Kobayashi.

CONCLUSION

Applicant respectfully submits the present application is in condition for allowance. If the Examiner believes a telephone conference would expedite or assist in the allowance of the present application, the Examiner is invited to call Arlen M. Hartounian at (408) 720-8300.

Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due.

Respectfully submitted,

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